

Seriously ill<sup>1</sup> TB suspect<sup>2</sup> HIV positive<sup>3</sup>  
with danger signs

Immediate referral to a higher level facility, if necessary<sup>4</sup>

Parenteral antibiotics for empiric treatment of bacterial infection  
Consider treatment for PCP  
Xpert

Xpert  
MTB+/RIF+

Xpert  
MTB+/RIF-

Xpert  
MTB-/RIF-

- Treat for TB
- CPT
- ART
- DST FLD+SLD<sup>5</sup>

- Treat for TB
- CPT
- ART

Improvement  
after 3 days

Clinical worsening or no  
improvement  
after 3 days

TB unlikely

Reassess for other diseases  
HIV Rx assessment<sup>7</sup>  
CPT

- Repeat Xpert  
- Additional investigations for EPTB or other diseases<sup>6</sup>  
- Consider empiric TB treatment  
- Complete antibiotics  
- HIV treatment assessment<sup>7</sup>  
- CPT

<sup>1</sup> Seriously ill refers to the presence of danger signs, including: respiratory rate > 30/min, temperature > 39°C, heart rate > 120/min and unable to walk unaided.

<sup>2</sup> Among adults and adolescents living with HIV, a TB suspect is defined as a person who reports any one of current cough, fever, weight loss or night sweats. Among children living with HIV, a TB suspect is defined as a person who reports one of poor weight gain, fever, current cough, or history of contact with a TB case, and is clinically assessed as high risk of TB. People living with HIV who are not classified as TB suspects should be offered isoniazid preventive therapy.

<sup>2</sup> In all persons with unknown HIV status, HIV testing should be performed according to national guidelines or validated testing algorithms. In patients who are HIV negative or remain HIV unknown (e.g., refusal), a TB suspect is defined according to national case definitions.

<sup>4</sup> The highest priority should be to provide the patient with life-sustaining supportive therapy, such as oxygen and parenteral antibiotics. If life-sustaining therapy is not available at the initial point of care, the patient should be transferred immediately to a higher level facility before further diagnostic testing.

<sup>5</sup> In low MDR-TB prevalence setting, a confirmatory test for Rifampicin resistance should be performed. See MDR-TB algorithm.

<sup>6</sup> Additional investigations for TB may include chest x-ray, liquid culture of sputum, lymph node aspiration for acid-fast bacilli microscopy and culture, and abdominal ultrasound. Non-tuberculosis mycobacterial infection should be considered in the differential diagnosis of patients who have a negative Xpert but a sputum or extra-pulmonary specimen with acid-fast bacilli.

<sup>7</sup> An HIV treatment assessment includes WHO clinical staging and/or CD4 count to assess eligibility to ART. See ART guidelines.